

**LASER SHOCK PEENED GAS TURBINE ENGINE
COMPRESSOR AIRFOIL EDGES**

ABSTRACT

Gas turbine engine compressor component that has an airfoil such as a compressor blade with a metallic airfoil having a leading edge and a trailing edge and at least one
5 laser shock peened surface extending radially along at least a portion of the leading edge and a region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into the airfoil from the laser shock peened surface.